

ABSTRACT

A semiconductor device to which active drive current programming is applied, comprising current load cells each having a current load and a current load driving circuit, which are arranged in a matrix, capable of reducing the circuit scale of a current driver with little change made in the structure of the current load driving circuit, and a driving method of the same.

A current load cell (113, 114) includes a current load driving circuit which is provided with a transistor (115) connected in series with a current load (122) between first and second power supplies (109, 110); a capacitance (116) connected between the control terminal of the transistor (115) and the first power supply (109); and switches (117, 118) connected between the control terminal of the transistor (115) and a corresponding data line. The output (101) of a current driver is connected to a plurality of data lines via a selector (123, 124), and the plural data lines connected to one output of the current driver via the selector and at least one of the switches of each of the current load cells corresponding to the respective data lines are drive-controlled in a time division manner during one horizontal period.